

IN THE CLAIMS

1. (previously presented) A prefabricated construction element for use after its manufacturing as an underlayment or backerboard comprising:

(a) a cementitious core having an upper principal face and a lower principal face;

(b) an impervious non-cementitious reinforcement web on the lower principal face of the core, the impervious non-cementitious reinforcement web remaining on the lower principal face of the core after the manufacture of the construction element;

(c) a cementitious bonding surface remaining on the upper principal face of the construction element after the manufacture of the construction element; and

(d) a non-cementitious surface remaining on the lower principal face of the construction element after the manufacture of the construction element;

the impervious non-cementitious reinforcement web having a sufficient tensile strength to provide the construction element with a flexural strength capable of supporting loads associated with elements used as an underlayment or backerboard;

the impervious non-cementitious reinforcement web having a resistance to free water penetration greater than or equal to that of felt paper;

the core including alkaline resistant fibers; and

the construction element being prefabricated.

2. (original) The construction element of Claim 1, the alkaline resistant fibers being chopped reinforcement fibers randomly dispersed in the core.

3. (previously presented) The construction element of Claim 2, the impervious non-cementitious reinforcement web comprising a reinforced polymer membrane.

4. (previously presented) The construction element of Claim 2, the impervious non-cementitious reinforcement web comprising water impervious paperboard.

5. (previously presented) The construction element of Claim 2, the impervious non-cementitious reinforcement web comprising spunbonded olefin.

6. (previously presented) The construction element of Claim 2, the impervious non-cementitious reinforcement web comprising an alkaline resistant dense polymer fiber mat.

7. (previously presented) The construction element of Claim 2, the core comprising Portland cement and an additive selected from the group consisting of expanded shale, expanded clay, sintered clay, pumice, slag, calcium carbonate, slate, diatomaceous slate, perlite,

vermiculite, scoria, volcanic cinders, tuff, diatomite, sintered fly ash, industrial cinders, gypsum, foam beads and glass beads.

8. (previously presented) A prefabricated asymmetrical construction element for use after its manufacturing as an underlayment or backerboard, the construction element having a top surface and a bottom surface, the construction element being asymmetrical in that the moisture resistant properties of the top surface are different from the bottom surface, the construction element comprising:

(a) a core having an upper principal face and a lower principal face;

(b) a pervious upper reinforcement material on the upper principal face of the core;

(c) an upper cementitious coating in communication with the upper principal face of the core and the pervious upper reinforcement material;

(d) an impervious non-cementitious reinforcement web on the lower principal face of the core, the impervious non-cementitious reinforcement web remaining on the lower principal face of the core after the manufacture of the cementitious panel;

(e) a pervious cementitious bonding surface remaining on the upper principal face of the cementitious panel after the manufacture of the cementitious panel; and

(f) a non-cementitious surface remaining on the lower principal face of the cementitious panel after the manufacture of the cementitious panel;

the impervious non-cementitious reinforcement web having a sufficient tensile strength to provide the construction element with a flexural strength capable of supporting loads associated with elements used as an underlayment or backerboard;

the impervious non-cementitious reinforcement web having a resistance to free water penetration greater than or equal to that of felt paper;

the cementitious panel having a core including cement, and

the cementitious panel being asymmetrical in design such that after manufacture, the top surface includes the pervious cementitious bonding surface and the bottom surface includes the impervious non-cementitious reinforcement web.

9. (previously presented) The cementitious panel of Claim 8, the impervious non-cementitious reinforcement web comprising a single reinforced polymer membrane layer.

10. (previously presented) The cementitious panel of Claim 8, the impervious non-cementitious reinforcement web comprising water impervious paperboard.

11. (previously presented) The cementitious panel of Claim 8, the impervious non-cementitious reinforcement web comprising spunbonded olefin.

12. (previously presented) The cementitious panel of Claim 8, the impervious non-cementitious reinforcement web comprising an alkaline resistant dense polymer fiber mat.

13. (previously presented) The cementitious panel of Claim 8, the cement core comprising Portland cement and an additive selected from the group consisting of expanded shale, expanded clay, sintered clay, pumice, slag, calcium carbonate, slate, diatomaceous slate, perlite, vermiculite, scoria, volcanic cinders, tuff, diatomite, sintered fly ash, industrial cinders, gypsum, foam beads and glass beads, and

wherein there is only one impervious non-cementitious reinforcement web for the construction element, that being located on the lower principal face of the construction element.

Claims 14-44 (canceled)

45. (previously presented) A prefabricated asymmetrical construction element for use after its manufacturing as an underlayment or backerboard, the construction element having a top surface and a bottom surface, the construction element being asymmetrical in that the moisture resistant properties of the top surface are different from the bottom surface, the construction element comprising:

(a) a cement core having an upper principal face and a lower principal face;

(b) a pervious reinforcement layer on the upper principal face of the core;

(c) a cement slurry binding the reinforcement layer to the upper principal face of the core;

(d) an impervious non-cementitious reinforcement web layer on the lower principal face of the core, the impervious reinforcement web having a non-cementitious lower surface, the impervious web remaining on the lower principal face of the core after the manufacture of the structural construction element;

(e) a pervious cementitious bonding surface remaining on the upper principal face of the structural construction element after the manufacture of the structural construction element; and

(f) a non-cementitious surface remaining on the lower principal face of the structural construction element after the manufacture of the structural construction element;

the structural construction element being asymmetrical in design such that after manufacture, the upper principal face includes a pervious cementitious bonding surface and the lower principal face includes an impervious non-cementitious reinforcement web and a non-cementitious lower surface;

wherein there is only one impervious non-cementitious reinforcement web for the construction element, that being located on the lower principal face of the structural construction element;

the impervious non-cementitious reinforcement web barrier enabling water vapor to pass therethrough; and

the impervious non-cementitious reinforcement web having a sufficient tensile strength to provide the construction element with a flexural strength capable of supporting loads associated with elements used as an underlayment or backerboard;

the impervious non-cementitious reinforcement web having a resistance to free water penetration greater than or equal to that of felt paper;

46. (previously presented) The prefabricated asymmetrical structural construction element of Claim 45, the upper principal face and the lower principal face of the structural construction element have different moisture-resistant surfaces, respectively, on each.

Claims 47-48 (canceled)

49. (previously presented) The prefabricated structural asymmetrical cementitious panel of Claim 45, the core including alkaline resistant fibers.

50. (previously presented) The prefabricated structural asymmetrical cementitious panel of 49, the alkaline resistant fibers being chopped reinforcement fibers randomly dispersed in the core.

51. (previously presented) The prefabricated structural asymmetrical cementitious panel of Claim 50, the impervious non-cementitious reinforcement web comprising a reinforced polymer membrane.